CLAIMS

1. A method of representing a document written in a markup language, the method comprising:

providing a virtual node tree describing the structure of the data types in the document, each one of the nodes in the virtual node tree respectively corresponding to one element of a specific data type in the document;

for each one of the nodes in the virtual node tree, providing a data array including information identifying the relationship of the node to other nodes in the virtual node tree and a reference indicating the location of the data corresponding to the node; and

obtaining, by a set of software components, the data corresponding to the nodes using the reference included in the data array.

2. The method recited in claim 1, wherein the data in the document is stored in a document block in memory.

3. The method recited in claim 2, wherein the document is written in XML or a variation of XML.

4. The method recited in claim 1, wherein the data arrays further include a flags field.

5. The method recited in claim 4, wherein a flag in the flags field indicates whether or not the node is the last sibling in a list of siblings.

6. The method recited in claim 4, wherein a flag in the flags field identifies the type of the node data.

7. The method recited in claim 1, wherein the relationship of the nodes to the other nodes in the virtual node tree is indicated by a child index and a sibling index in the data array.

8. The method recited in claim 1, wherein the data arrays have a fixed length.

9. The method recited in claim 1, wherein the data arrays have a variable length.

10. A mobile phone comprising:

a set of software components;

a memory connected to the set of software components; and

a display,

wherein at least one of the set of software components carries out a method of representing a document written in a markup language and rendering the document on the display, said method comprising:

providing a virtual node tree describing the structure of the data types in the document, each one of the nodes in the virtual node tree respectively corresponding to one element of a specific data type in the document;

for each one of the nodes in the virtual node tree, providing a data array including information identifying the relationship of the node to other nodes in the virtual node tree and a reference to the location of the

data corresponding to the node; and

obtaining the data corresponding to the nodes using the references included in the data array.

11. The mobile phone recited in claim 10, further comprising a browser or other software application adapted to receive said document and render said document on said display.

12. The mobile phone recited in claim 10, wherein the document is an XML document and the browser is an XML browser.

13. The mobile phone recited in claim 10, wherein the data in the document is stored in a document block in said memory.

14. The mobile phone recited in claim 10, wherein the data arrays further include a flags field.

15. The mobile phone recited in claim 14, wherein

a flag in the flags field indicates whether or not the node is the last sibling in a list of siblings.

16. The mobile phone recited in claim 14, wherein a flag in the flags field identifies the type of the node data.

17. The mobile phone recited in claim 10, wherein the relationship of the nodes to the other nodes in the virtual node tree is indicated by a child index and a sibling index in the data array.

18. The mobile phone recited in claim 10, wherein the data arrays have a fixed length.

19. The mobile phone recited in claim 10, wherein the data arrays have a variable length.